STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.	MO-0119431

Owner: Old Barn Antiques

Address: 27886 South Highway 5, Lebanon, MO 65536

Continuing Authority: Same as above Address: Same as above

Facility Name: Britt's Bar-B-Que & Steakhouse

Address: 12941 West Highway 64, Lebanon, MO 65536

Legal Description: NW ¼, NE ¼, Sec. 4, T34N, R17W, Laclede County

Receiving Stream: Unnamed Tributary to Woodward Creek (U)

First Classified Stream and ID: Bennett Springs Creek (C)(01185)

USGS Basin & Sub-watershed No.: (10290110-030005)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 - Restaurant - SIC #6552

Septic tank/recirculating sand filter/chlorination/sludge disposal is by contract hauler.

Design population equivalent is 92.

Design flow is 2,700 gallons per day.

Actual flow is 1,250 gallons per day.

Design sludge production is 0.644 dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge

Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of

Executive Secretar

the Law.

October 4, 2002	
Effective Date	
0.4.12.2007	
October 3, 2007	
Expiration Date	
MO 780-0041 (10-93)	

Jim Hull, Director of Staff, Clean Water Commission

Clean Water Commi

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 5

PERMIT NUMBER MO-0119431

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect until March 31, 2003. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTEAU AND FEEL VENT			INTERIM EFFLUENT MONITORING REQUIREMENT				
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE	
Outfall #001							
Flow	MGD * *		*	once/quarter**	24 hr. estimate		
Biochemical Oxygen Demand ₅ ****	mg/L		15	10	once/quarter**	* * *	
Total Suspended Solids****	mg/L		20	15	once/quarter**	* * *	
pH - Units	SU	****		****	once/quarter**	grab	
Fecal Coliform	#/100mL	1000		400	once/quarter**	grab	
Total Phosphorus	mg/L		*	*	once/quarter**	* * *	
Total Residual Chlorine (Note 1)	mg/L	1.0		1.0	once/quarter**	grab	

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE <u>January 28, 2003</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Parts I & III STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 3 of 5
PERMIT NUMBER MO-0119431

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective April 1, 2003, and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EF	FLUENT LIN	IITATIONS	MONITORING RE	QUIREMENTS
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001 Flow	MGD	*		*	once/quarter**	24 hr. estimate
Biochemical Oxygen Demand ₅ ****	mg/L		15	10	once/quarter**	***
Total Suspended Solids****	mg/L		20	15	once/quarter**	***
pH - Units	SU	****		****	once/quarter**	grab
Fecal Coliform	#/100mL	1000		400	once/quarter**	grab
Total Nitrogen	mg/L		*	*	once/quarter**	***
Total Phosphorus	mg/L		*	*	once/quarter**	grab
NO ₂ & NO ₃ as Nitrogen	mg/L		*	*	once/quarter**	grab
Total Residual Chlorine (Note 1)	mg/L	0.02		0.02	once/quarter**	grab
Ammonia as N	mg/L		*	*	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE <u>January 28, 2003</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

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MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Sample once per quarter in the months of January, April, July, and October.
- *** A composite sample made up from a minimum of four grab samples collected within a 24 hour period with a minimum of two hours between each grab sample.
- **** This facility is required to meet a removal efficiency of 85% or more.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

Note 1 - This permit contains a Total Residual Chlorine (TRC) limit.

a. If the TRC limit in this permit is 0.01 mg/L or 0.2 mg/L, you <u>must use</u> an analytical method that has a quantification limit of no greater than 0.05 mg/L TRC. For reporting purposes on the discharge monitoring report (DMR), all analytical values below 0.05 mg/L shall be reported as "<quantlim." All analytical values at or above the quantification limit of 0.05 mg/L shall be reported as the measured value. The permittee shall report the quantification limit in the remarks section of the DMR.

The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average.

The daily effluent value will be considered equal to 0 mg/L if it is below the quantification limit.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 1 - Total Residual Chlorine (TRC)(continued)

b. If the TRC limit in this permit is 1.0 mg/L; you <u>must use</u> an analytical method with a quantification limit between 0.2 and 0.5 mg/L. All analytical values below the quantification limit shall be reported as "<quantlim." All analytical values at or above the quantification limit shall be reported as the measured value.

The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average.

The daily effluent value will be considered equal to 0 mg/L if it is below the quantification limit.

- c. Disinfection is required year-round unless the permit specifically states that "Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31." If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.
- d. Do not chemically dechlorinate if it is not required in your permit.
- e. If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as "0 mg/L" TRC.

C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
- 4. Report as no-discharge when a discharge does not occur during the report period.

C. SPECIAL CONDITIONS (continued)

5. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 μg/L);
 - (2) Two hundred micrograms per liter (200 $\mu g/L$) for acrolein and acrylonitrile; five hundred micrograms per liter (500 $\mu g/L$) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 6. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.
- 8. By January 1, 2003, submit an engineering report to the Department of Natural Resources Southwest Regional Office, identifying means of achieving compliance with final TRC limits.

By April 1, 2003, achieve compliance with final TRC limits.



Missouri Department of Natural Resource Water Pollution Control Program Planning Section

Water Quality Review Sheet Determination of Effluent Limits

Facility Informat	ti	on
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FACILITY NAME: Britt's Bar-B-Que NPDES #: MO-0119431

FACILITY TYPE/DESCRIPTION: Septic tank/recirculating sand filter/chlorination/

sludge disposal by contract hauler

ECOREGION: Ozark Highlands 8- DIGIT HUC: 10290110 COUNTY: Laclede

Central Irregular Plains Osage Plains Mississippi Alluvial Plains Ozark Highlands

LEGAL DESCRIPTION: NE Sec. 4, T34N, R17W LATITUDE/LONGITUDE: +37.70858/-092.80508

Water Quality History: Some limits exceeded (BOD, Fecal Coliform, TRC)

Outfall Characteristics

	OUTFALL	Design Flow (cfs)	TREATMENT TYPE	RECEIVING WATERBODY	OTHER
Ī	001	0.004	See Above	Trib. to Woodward Hollow	

Receiving Waterbody Information

Waterbody	CLASS	7Q10(cfs)	*Designated Uses	OTHER CHARACTERISTICS
Trib. to Woodward Hollow	U	0.00	None	Losing
Woodward Hollow	U	0.00	None	Losing
Bennett Springs Cr.	P	62.0	AQL, LWW, CDF	

^{*}Cool Water Fishery (CLF), Cold Water Fishery (CDF), Irrigation (IRR), Industrial (IND),
Boating & Canoeing (BTG), Drinking Water Supply (DWS), Whole Body Contact Recreation (WBC),
Protection of Warmwater Aquatic Life and Human Health (AQL), Livestock & Wildlife Watering (LWW)

COMMENTS

Approximate outfall latitude and longitude coordinates from WQIS. Trib. to Woodward Hollow designated as Losing per Table J, 10 CSR 20-7.031.

MIXING CONSIDERATIONS

Mixing Zone. Unclassified stream is losing, no mixing zone allowed.

Zone of Initial Dilution (Z.I.D.). Unclassified stream is losing, no Z.I.D. allowed.

Permit Limits And Information

TMDL Watershed:	N	W.L.A.	STUDY CONDUCTED:	N	DISINFECTION REQUIRED:	Y	DISINFECTION WAIVER:	N
(Y OR N)		(Y or N)			(Y OR N)		(Y, N, NA)	

OUTFALL# 001

WET TEST (Y OR N): Y FREQUENCY: ONCE/YEAR A.E.C. 100% LIMIT: INSIGNIFICANT MORTALITY

PARAMETER	Units	Maximum Daily	Weekly Average	Monthly Average	COMMENTS
FLOW	MGD	*		*	Monitoring Only
BIOCHEMICAL OXYGEN DEMAND (BOD ₅)	MG/L		15	10	
TOTAL SUSPENDED SOLIDS	MG/L		20	15	
pН	MG/L	6 – 9		6 - 9	
FECAL COLIFORM	Col./100mL	1000		400	
Total Residual Chlorine	MG/L	0.019		0.019	
Ammonia as N	MG/L	*		*	Monitoring Once/Quarter
Total Nitrogen	MG/L	*		*	Monitoring Once/Quarter
NO ₂ + NO ₃ AS N	MG/L	*		*	Monitoring Once/Quarter
Total Phosphorous	MG/L	*		*	Monitoring Once/Quarter

Receiving Water Monitoring Requirements

No in-stream monitoring requested at this time.

Derivation and Discussion of Limits

Facility discharges to a losing stream, therefore losing stream effluent limits apply.

Outfall 001:

- Biochemical Oxygen Demand (BOD5). Criterion; 10 mg/l monthly average, 15 mg/l weekly average from 10 CSR 20-7.015(4)(B)1.
- Total Suspended Solids. Criterion; 15 mg/l monthly average, 20 mg/l weekly average from 10 CSR 20-7.015(4)(B)2.
- <u>pH</u>. Criterion; 6 9 standard units from 10 CSR 20-7.015(4)(B)3.
- Fecal Coliform. Criterion; 400 colonies/100mL monthly average and 1000 colonies/100mL daily maximum from 10 CSR 20-7.015(4)(B)4.
- <u>Total Residual Chlorine</u>. If chlorine is used as a disinfectant, effluent limits of 0.019 mg/L of total residual chlorine (TRC) are required to meet in-stream acute criteria.

Reviewer: JH Date: 7/31/02 Unit Chief: MD